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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,250	12/10/2001	Kiyoshi Hayashi	10873.848US01	2773

7590 08/10/2004

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Minneapolis, MN 55402-0903

EXAMINER

MAPLES, JOHN S

ART UNIT	PAPER NUMBER
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1745

DATE MAILED: 08/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,250

Applicant(s)

HAYASHI ET AL.

Examiner

John S. Maples

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4 and 5 ~~is~~ are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4 and 5 ~~is~~ are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshii et al.-US 5,637,416 (Yoshii)

See the Abstract to Yoshii along with column 1, lines 5-8; column 2, line 61 through column 3, line 10, Example 1, and column 5, lines 6-26. See also Figures 4 and 5 in Yoshii. In these portions of Yoshii, the nickel hydroxide positive electrode has an intermediate portion therein that has a higher porosity than outer portions thereof.

Applicant's arguments have all been considered but are not deemed persuasive. Applicant asserts that Yoshii does not discuss the porosity of the electrode after the active material has been deposited thereon. This may be true, however, one of ordinary skill in this art would have deduced the differences in the porosity in the finished electrode as described further in this action. Applicant alludes to such on page 4 of the remarks that accompany this amendment and the examiner also comes to such conclusion.

As stated by applicant, and which Yoshii describes, an electrode has a first lower porosity layer and a second higher porosity layer. The first layer is not filled with active material while the second layer is filled with active material. As a result, as applicant states on page 4, "Thus, the lower porosity layer would presumably have the highest porosity after filling with the active material". The examiner agrees with this statement, and the claimed subject matter is met by such teaching.

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This is because the porosity of parts of the intermediate parts (of which the lower porosity layer includes) has a higher porosity than surface parts of the electrode which includes the higher porosity layer. As seen in Figure 4 of Yoshii, the lower porosity layer is 7a and this layer indeed includes intermediate parts that are on the inside of the electrode (this layer also has surface parts but the claimed subject does not preclude this limitation). The other portion of the electrode 7 is the higher porosity layer and this layer also has surface parts that have a lower porosity than the intermediate parts of the layer 7a.

Applicant further argues that the lower porosity layer is on the outer surface of the substrate and not in an intermediate portion of the electrode. This may be true, however, as outlined previously in this action, the lower porosity layer also has portions thereof that are located in an intermediate portion of the electrode. This would be the portions that would be adjacent to the higher porosity layer.

3. Applicant's arguments relating to rejection based on the Matsumoto et al. patent have all been considered and are deemed persuasive.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the

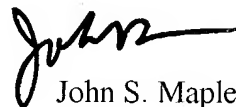
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advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John S. Maples whose telephone number is 571-272-1287. The examiner can normally be reached on Monday-Thursday from 6:15-3:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John S. Maples
Primary Examiner
Art Unit 1745

JSM/8-7-2004